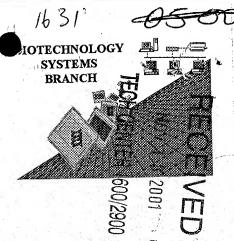
RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number:

09/540,209

Art Unit / Team No.:

6/14/2000

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,
- 2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

MARK SPENCER 703-308-4212

Page 1 of 19
TECH CENTER 1600/290 Corrected Diskette Needed

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000

TIME: 11:58:47

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\1540209.raw

Output Set: N: /Cxt3/06212000/1340209.14V

4 <110> APPLICANT: Keith G. Weinstock et al.
6 <120> TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROBACTER

CLOACAE FOR DIAGNOSTICS AND THERAPEUTICS

9 <130> FILE REFERENCE: 107196.135 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/540,209

C--> 14 (140) CURRENT APPLICATION NUMBER: US/09

14 <160> NUMBER OF SEQ ID NOS: 11324

ERRORED SEQUENCES

128258 <210> SEQ ID NO: 5664 128259 <211> LENGTH: 77 128260 <212> TYPE: PRT 128261 <213> ORGANISM: Enterobacter cloacae 128263 <400> SEQUENCE: 5664 128264 Ser Arg Thr Arg Gln Glu Arg Lys Ser Lys Thr Asp Arg Lys Lys Arg 128266 Asn Arg Lys Glu Gln Gly Ser Lys Thr Pro Gln Glu Glu Asn Pro Asn 128267 20 25 30 128268 Lys Thr Lys Ala Asn Arg Arg Asp Ser Ser Gln Asn Thr Ser Arg Asp 128269 .35. 40 45 128270 Thr Lys Thr Thr Glu Ala Thr Pro Ile Gln Lys Asp Gly Asp Asn Ile 128271 50 55 60 128272 Ser Thr Lys Lys Thr Asn Arg Asp Lys Asn Arg Thr 128273 65 , 70 , 75 E--> 128273 65 128304 <210> SEQ ID NO: 5666 128305 <211> LENGTH: 89 128306 <212> TYPE: PRT 128307 <213> ORGANISM: Enterobacter cloacae 128309 <400> SEQUENCE: 5666 128310 Ser Ser Gly Cys Arg Gln Glu Asn Arg Leu Ser Val Gly Asn Ser Ile 128311 1 5 10 128312 Gly Gln Asp Arg Arg Phe Leu Phe Lys Tyr Met Pro Glu Leu Glu Ser 128313 20 25 30 128314 Tyr Phe His Tyr Arg Tyr Leu Asp Val Ser Thr Leu Lys Glu Leu Ala 128315 35 40 45 128316 Arg Arg Trp Lys Pro Glu Ile Phe Asp Gly Phe Thr Lys Gln Gly Thr 128317 50 55 60 128318 His Gln Ala Met Asp Asp Ile Arg Glu Ser Val Ala Glu Leu Ala Tyr 128319 65 70 75 80 128320 Tyr Arg Glu Asn Phe Ile Lys Leu 8.5 128323 <210> SEQ ID NO: 5667 128324 <211> LENGTH: (131) /30 (rest page) 128325 <212> TYPE: PRT 128326 <213> ORGANISM: Enterobacter cloacae

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

```
128328 <400> SEQUENCE: 5667
     128329 Pro Ala Thr Ala Gly Tyr Ala Arg Arg Val Glu Asn Asn Met Ser Ala
      128330 1
                                5
                                                          1.0
                                                                                  15
      128331 Asp Glu Asn Asn Leu Ile Trp Ile Asp Leu Glu Met Thr Gly Leu Asp
      128332 20
                                                   25
     128335 Asn Leu Asn Ile Leu Ala Glu Gly Pro Thr Ile Ala Val His Gln Ser 128336 \phantom{000}50\phantom{0}
     128337 Asp Asp Gln Leu Ala Leu Met Asp Glu Trp Asn Val Arg Thr His Thr 128338 65 70 75 80
     128339 Gly Ser Gly Leu Val Glu Arg Val Lys Ala Ser Thr Leu Gly Asp Arg 128340 85 90 95
     128341 Glu Ala Glu Leu Ala Thr Leu Glu Phe Leu Lys Gln Trp Val Pro Ala
128342 100 105 110
     128343 Gly Lys Ser Pro Ile Cys Gly Gln Gln His Trp Ser Gly Ser Ser Phe
128344 115 120 125
     128345 Pro Val
E--> 128346 130
     128348 <210> SEQ ID NO: 5668

128349 <211> LENGTH: (225) 2 2 4

128350 <212> TYPE: PRT

128351 <213> ORGANISM: Enterobacter cloacae
     128353 <400> SEQUENCE: 5668
     128354 Pro Leu Pro Leu Ser Trp Gln Ser Val Val Lys Thr Ser Ala Thr Phe
     128355 1
                                                         10
     128356 Phe Thr Asn Ile Thr Leu Gly Lys Leu Ser Leu Leu Phe Leu Ala Leu 128357 20 25 30
     128358 Gly Val Ala Tyr Ala Ala Ile Arg Arg Thr Leu Leu Ile Val Tyr Pro 128359 \phantom{000}35\phantom{000} \phantom{000}45\phantom{000}
     128359 35
     128360 Pro Ile Leu Ser Asp Gly Leu Phe Asn Phe Val Val Met Gln Thr Leu 128361 \phantom{0}50 \phantom{0}55 \phantom{0}60
     128362 Phe Tyr Ile Pro Phe Phe Leu Ile Gly Ala Leu Ala Phe Ile His Pro 128363 65 70 75 80
     128364 Arg Leu Lys Ala Leu Phe Thr Thr Pro Ser Pro Trp Cys Ala Val Gly 128365 85 90 95
     128366 Ala Ala Leu Ala Phe Ala Ala Tyr Leu Leu Asn Gln Arg Tyr Gly Ser
128367 100 105 110
     128368 Gly Asp Ala Trp Met Tyr Glu Thr Glu Ser Val Ile Thr Met Leu Met
128369 115 120 125
     128370 Gly Leu Trp Met Val Asn Val Val Phe Ala Leu Gly His Arg Leu Leu 128371 130 135 140
     128372 Asn Phe Lys Ser Ser Arg Val Thr Tyr Phe Val Asn Ala Ser Leu Phe 128373 145 150 155 160
     128374 Ile Tyr Leu Val His His Pro Leu Thr Leu Phe Phe Gly Ala Tyr Ile
128375 165 170 175
     128376 Thr Pro His Ile Ala Ser Asn Ala Leu Gly Phe Phe Thr Gly Leu Val
128377 180 185 190
     128378 Phe Val Val Gly Ile Ala Ile Val Leu Tyr Glu Ile His Leu Arg Ile
```

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

Input Set : N:\jumbos\540209.txt Output Set: N:\CRF3\06212000\I540209.raw

195 128379 200 205 128380 Pro Leu Leu Arg Phe Leu Phe Ser Gly Lys Pro Gln Val Lys Ala Gly 128381 210 215 220 E--> 128383 225 128420 <210> SEQ ID NO: 5670 128421 <211> LENGTH: 308 128422 <212> TYPE: PRT 128423 <213> ORGANISM: Enterobacter cloacae 128425 <400> SEQUENCE: 5670 128426 Ser Pro Cys Ile Ile Ala Thr Leu Phe Ala Pro Glu Pro Ser Asp Val 5 128427 1 10 128428 Ile Pro Phe Pro Arg Ser Leu Glu Gln Ala Val Ala Ala Pro Phe Arg 128429 20 25 30 128430 Asp Phe Phe Gly Arg Asn Asn Ala Trp Leu Ile Leu Leu Leu Ile Val 128431 35 40 45 128432 Leu Tyr Lys Leu Gly Asp Ala Phe Ala Met Ser Leu Thr Thr Thr Phe 128433 50 55 60 128434 Leu Ile Arg Gly Val Gly Phe Asp Ala Gly Glu Val Gly Val Val Asn 128435 65 70 75 80 128436 Lys Thr Leu Gly Leu Phe Ala Thr Ile Val Gly Ala Leu Tyr Gly Gly 128437 9095 128438 Val Leu Met Gln Arg Leu Ser Leu Phe Arg Ala Leu Leu Ile Phe Gly 128439 100 105 110 128440 Ile Leu Gln Gly Ala Ser Asn Ala Gly Tyr Trp Leu Leu Ser Ile Thr 128441 115 120 125 128442 Asp Lys His Met Ile Ser Met Ala Thr Ala Val Phe Phe Glu Asn Leu 128443 130 135 140128444 Cys Gly Gly Met Gly Thr Ala Ala Phe Val Ala Leu Leu Met Thr Leu 128445 145 150 150 155 128446 Cys Asn Lys Ser Phe Ser Ala Thr Gln Phe Ala Leu Leu Ser Ala Leu 128447 165 170 175 128448 Ser Ala Val Gly Arg Val Tyr Val Gly Pro Val Ala Gly Trp Phe Val 128449 180 185 190 128450 Glu Ala His Gly Trp Pro Thr Phe Tyr Leu Phe Ser Val Val Ala Ala 128451 195 200 205 128452 Val Pro Gly Ile Leu Leu Leu Leu Val Cys Arg Gln Thr Leu Glu Tyr 128453 210 215 220 128454 Thr Gln Arg Thr Glu His Phe Met Pro Arg Thr Glu Tyr Gln Ala Ala 128455 225 230 230 235 240 128456 Tyr Arg Phe Ala Leu Arg Leu Leu Met Ala Gly Cys Leu Ala Leu Val 128457 245 250 255 255 128458 Val Trp Leu Ala Val Leu Ile Ile Asn Ala Thr Thr Thr Leu Ser Leu 128459 260 265 270 128460 Pro Phe Glu Thr Gln Leu Leu Asp Ala Gly Val Phe Leu Ala Ile Val 128461 275 280 285 128462 Gly Ile Leu Thr Gly Gly Met Leu Asp Phe Met Ser Leu Arg Lys Thr 290 295 300 128463 128464 Gln Met Thr E--> 128465 305

PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000 TIME: 11:59:03

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\1540209.raw

```
128467 <210> SEQ ID NO: 5671
128468 <211> LENGTH: (335)
128469 <212> TYPE: PRT
      128470 <213> ORGANISM: Enterobacter cloacae
      128472 <220> FEATURE:
      128473 <221> NAME/KEY: UNSURE
      128474 <222> LOCATION: (333)
      128476 <400> SEQUENCE: 5671
      128477 Met Ala Asn Tyr Thr Val Asp Glu Phe Ile Ile Gln Leu Gly Phe Asn
      128478 1
                                                           10
      128479 Glu Thr Val Ser Lys Asn Leu Gln Lys Leu Glu Ser Arg Thr Leu Lys 128480 20 25 30
      128481 Val Ala Glu Arg Ile Glu Lys Asn Leu Asn Arg Ala Phe Thr Pro Lys
128482 35 40 45
      128483 Gly Asp Phe Gly Arg Val Ile Ser Ser Ala Asn Asn Ala Ser Lys Gln 128484 50 60
      128485 Ile Asn Arg Ala Phe Ser Lys Ser Met Asn Phe Asp Glu Ala Gly Lys
128486 65 70 75 80
      128487 Ser Ser Val Lys Ser Val Glu Asn Ala Ala Lys Ala Ser Ala Lys Arg
128488 85 90 95
      128489 Ile Lys Asp Met Tyr Gln Asp Ala Tyr Gly Ala Lys Gly Lys Gly Arg
128490 100 105 110
      128491 Ser Asn Pro Pro Ala Ala Gly Lys Pro Gln Gly Arg Gly Ser Asp Leu
128492 115 120 125
      128493 Thr Ala Ala Asn Ser Ile Arg Ser Leu Ala Asn Thr Gln Phe Tyr Ser
128494 130 135 140
      128495 Asn Leu Thr Arg Arg Leu Glu Gly Met Gly Ser Thr Gly Gln Ala Arg
128496 145 150 155 160
      128497 Ala Met Lys Leu Arg Gln Gln Val His Gly Leu Arg Asp Asp Ala Leu 128498 165 \hspace{1.5cm} 170 \hspace{1.5cm} 175
      128499 Ala Asn Pro Ser Ala Ser Leu Asn Gln Phe Arg Leu Ala Leu Arg Ala
128500 180 185 190
      128501 Ala Thr Asp Ser Ala Ser Lys Trp Ala Ser Gln Asn Arg Lys Gln Val
              195
                                               200
      128502
                                                                  205
      128503 Ser Asn Ala Glu Gly Leu Ser Ser Ser Phe Gly Arg Leu Val Ser Val 128504 \phantom{000}210\phantom{000} 215 \phantom{0000}220\phantom{000}
      128505 Ser Ala Ala Leu Tyr Gly Thr Phe Glu Ala Val Arg Lys Val Val Glu 128506 225 230 235 240
      128507 Thr Gly Val Ala Arg Glu Gly Val Asn Leu Ser Ala Glu Ala Val Phe
128508 245 250 255
      128509 Lys Gly Gln Ser Lys Asn Ala Lys Thr Phe Ala Ala Gln Phe Ser Asp
128510 260 265 270
      128511 Gln Ile Gly Gln Gly Val Thr Glu Thr Leu Lys Gln Tyr Thr Gly Phe 128512 275 280 285
      128513 Ala Ala Gly Ala Gln Asn Ser Leu Gly Tyr Gln Gly Thr Gln Asp Phe
128514 290 295 300
                                         295
      128515 Tyr Lys Asn Ala Ala Val Phe Gly Arg Ile Arg Gly Leu Asp Ala Glu
128516 305 310 315 320
W-0K 128517 Gln Arg Thr Gly Ile Met Ile Phe Thr Ser Arg Ala Xaa Ser
```

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

```
335
                                                        330
                                325
E--> 128518
     128671 <210> SEQ ID NO: 5675
128672 <211> LENGTH: 173 //72
     128673 <212> TYPE: PRT
     128674 <213> ORGANISM: Enterobacter cloacae
     128676 <400> SEQUENCE: 5675
     128677 Val Leu Glu Val Lys Thr Ala Gln Met Gly His Glu Ser Thr Arg Phe
                                                      10
     128678 1
     128679 Thr Arg Leu Val Glu Asn Leu Asn Tyr Ala Val Glu Asn Leu Val Pro
128680 20 25 30
     128681 Thr Phe Gly Ser His Arg Ile Thr Gln Gln Ser Ala Ala Leu Gly 128682 35 40 45
     128683 Arg Thr Ala Thr Gln Pro Ala Asn Gln Lys Ala Ile Ala Asn Leu Val
128684 50 55 60
              50
     128685 Tyr Gly Gly Glu Trp Gly Lys Glu His Leu Gly Asn Gln Val Ala Gly 128686 65 70 75 80
     128687 Asp Gly Trp Lys Tyr Arg Gly Arg Gly Leu Lys Gln Ile Thr Gly Leu 128688 95 95
     128689 Ser Asn Tyr Arg Ser Cys Gly Gln Ala Leu Lys Leu Asp Leu Val Thr
128690 100 105 110
     128691 His Pro Glu Leu Leu Glu Lys Asp Glu Tyr Ala Ala Arg Ser Ala Ala
128692 115 120 125
      128693 Trp Phe Tyr Ala Ser Arg Gly Cys Leu Leu His Ser Gly Asp Val Glu 128694 130 135 140
      128695 Arg Val Thr Leu Leu Ile Asn Gly Gly Arg Asn Gly Leu Asp Lys Arg
128696 145 150 155 160
     128698 Arg Ala Leu Phe Asn Leu Ala Lys Ser Val Leu Val
128698 165 170
                              165
E--> 128698
      128698
128723 <210> SEQ ID NO: 5677
128724 <211> LENGTH: 114 //3
      128725 <212> TYPE: PRT
      128726 <213> ORGANISM: Enterobacter cloacae
      128728 <400> SEQUENCE: 5677
      128729 Phe Pro Glu Leu Thr Ser Leu Pro Val Arg Ile Thr Leu Met Val Ser
                                5
                                                        10
      128731 Gly Ile Val Val Asn Ala Leu Ala Thr Gly Met Tyr Ile Gly Ala Gly 128732 20 25 30
      128733 Phe Gly Ala Gly Pro Arg Asp Gly Leu Met Thr Gly Ile His Ala Arg
128734 35 40 40
      128735 Leu Gly Trp Ser Ile Arg Ser Val Arg Thr Ala Ile Glu Val Thr Val
128736 50 55 60
      128737 Leu Ile Val Gly Tyr Leu Leu Gly Gly Ala Phe Gly Val Gly Thr Val 128738 65 70 75 80
      128739 Leu Tyr Ala Leu Thr Ile Gly Pro Leu Ile Gln Leu Cys Leu Pro Trp 128740 85 90 95
      128741 Phe Arg Gln Arg Pro Arg Ile Gln Lys Ala Ala Gln Pro Glu Arg Ile
                                                   105
      128742 100
E--> 128743 Val
      128746 <210> SEQ ID NO: 5678
```

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000 TIME: 11:59:03

				0	$\bigcirc 2$	1.0										
128747	<21	l> Li	ENGTI	H: (3.	70) >	VI										
128748	<212	2> T	YPE:	PRT)											
128749	<21:	3> OI	RGAN:	ISM:	Ente	Enterobacter cloacae										
128751																
					UNSURE											
	<222> LOCATION: <400> SEQUENCE:				• •											
128756							Tovs	Val	Glv	Phe	Gln	Cvs	Tive	Livs	Val	Tle
128757		neu.	11.2	110	5	VCL	пуо	Y CL.I.	OLY	10	0111	Cyo	273	my w	15	1.20
128758		Mo+	Aen	T.Ou		G311	T.57C	Tla	Δla		17 a 1	Clv	G1n	Ara		T.trq
128759	1111	IIC C	11022	20	DCA	Oxa	БуЗ	110	25	ДСи	y C2 .L.	012	0.211	30	1100	m ₂ U
128760	Con	C1.0	015		Con	TOU	Tara	01n		Len	Mot	λΊз	Sor		Arct	17 a 1
128761	Ser	GIU	35	TTG	Ser	пец	пур	40	Ser	пец	rie c	мта	45	Ser	Mr. 9	V CLJL
128762	Com	17 - 1		7.00	7.00	Cor	1701		C1**	17.2.1) ran	λνα		T 1 0	Marx	7 an
	Ser		SET	изр	АБР	ser		ASP	GTA	val	ASP		шец	TIG	тут	MSII
128763	** !	50	т	3	Ŧ	T	55	T	G	*	Dha	60	a 1	T		7
128764		Cys	Leu	Asn	гàг		ASI	ьeu	ser	Asp		Pne	GTĀ	пуз	ser	
128765		ord.	m 1			70		a			75	~ 3	~	a1	×	80
128766	vaı	Thr	rne	Asn	-	тте	Leu	Ser	Asp		GTÜ	GIU	гăг	GLU		Val
128767			_	- 7	85		_			90	_	~	m1	~	95	
128768	GTĀ	Ala	Pro		Tyr	Gin	Asn	Lys		His	Leu	ryr	Thr		Trp	Asp
128769				100			_		105			_	_	110		•
128770	Val	Gln		Ile	Met	Asp	Ala		Gly	Tyr	Pro	Lys		Arg	Asp	His
128771			115					120					125	_		
128772	Tyr		Ser	Arg	Ala	Ile		Thr	Gln	Asn	His		Gly	Gly	Thr	Gly
128773		130					135					140				
128774	-	Ser	Thr	Thr	Ser		Ala	Leu	Ala	Val		Ala	Ala	Leu	Asp	
128775	145					150					155					160
128776	Gln	Leu	Asn	Ala	Arg	Val	Leu	Met	Ile	Glu	Trp	Asp	Pro	Gln	Gly	Ser
128777					165					170					175	
128778	Ile	Gly	Ser	Ser	Met	Ile	Gln	Ser	Val	Ser	Glu	Asp	Asp	Val	Phe	Leu
128779				180					185					190		
128780	Thr	Ala	Ile	Asp	Ala	Ile	Leu	G1y	Ile	Tyr	Glu	Glu	Asn	Ser	Glu	Tyr
128781			195					200					205			
128782	Lys	Lys	Tyr	Leu	Asp	ser	Gly	Phe	Ser	Glu	Glu	Glu	Ile	Ile	Thr	Asn
128783		210					215					220				
128784	Met	Pro	Phe	Ser	Thr	His	Leu	Pro	Asn	Leu	Asp	Val	Ile	Thr	Ala	Phe
128785	225					230					235					240
128786	Pro	Thr	Asp	Ala	Arg	Phe	Lys	Asp	Lys	Tyr	Trp	Gln	Cys	Ser	Arg	Glu
128787					245					250					255	
128788	Glu	Arg	Thr	Ser	Leu	Leu	Leu	Arg	Phe	Lys	Glu	Val	Ile	Leu	Pro	Val
128789		-		260					265					270		
128790	Leu	Lys	Gln	Asn	Tyr	Asp	Leu	Ile	Ile	Ile	Asp	Thr	Pro	Pro	Glu	Asp
128791		~	275			-		280			7.		285			
128792	Ser	Pro	Leu	Ile	Trp	Ala	Ala	Asp	Glu	Ala	Ala	Asp	Gly	Ile	Leu	Va1
128793		290			-		295	-				300	-			
128794	Ala		Ser	Pro	Arq	Glu	Tyr	Asp	Tyr	Ala	Ser		Thr	Asp	Phe	Met
	305			•	,	310	2	- 1	4 "	_	315		-			320
128796		Thr	Ile	Ser	Glu		Cvs	Lvs	Gln	Ser		Ser	Lys	GLy	Asp	
128797					325	3				330					335	_

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

Input Set : N:\jumbos\540209.txt Output Set: N:\CRF3\06212000\I540209.raw

≥ 128798 Leu Lys Trp Phe Xaa Val Leu Ala Val Asn Val Asn Asp Lys Ser Pro 128799 340 345 350 128800 Tyr Glu Arg Ile Val Leu Asp Lys Leu Ile Lys Thr Val Gln Gly Pro 128801 355 360 365 128802 Phe E--> 128803 370 128860 <210> SEQ ID NO: 5688 128861 <211> LENGTH: (357) 128862 <212> TYPE: PRT 128863 <213> ORGANISM: Enterobacter cloacae 128865 <220> FEATURE: 128866 <221> NAME/KEY: UNSURE 128867 <222> LOCATION: (354) 128869 <400> SEQUENCE: 5680 128870 Thr Asp Glu Arg Ile Leu Thr Met Ser Asn Val Phe Tyr Met Pro Pro 10 128872 Val Thr Leu Met Gly Leu Asn Ala Ile Arg Leu Leu Gly Asp Glu Leu 128873 202530 128874 Val Ser Arg Glu Leu Lys Lys Ala Leu Ile Val Thr Asp Arg Val Leu 128875 35 40 45 128876 Ala Asp Thr Gly Leu Val Asn Lys Leu Thr Asp Glu Leu Glu Ala His 128877 50 55 60 128878 Lys Ile Ser Tyr Ala Ile Phe Asp Gly Val Gln Pro Asn Pro Thr Glu 128879 65 70 75 80 128880 Lys Asn Ile Asp Asp Gly Leu Ala Leu Leu Ala Lys Ser Asn Ala Asp 128881 85 90 95 128882 Phe Val Ile Ser Phe Gly Gly Gly Ser Ser His Asp Thr Ala Lys Gly 128883 100105105 128884 Ile Ala Leu Val Ala Thr Asn Gly Gly His Ile Arg Asp Tyr Ser Lys 128885 115 120 125128886 Gly Val His Leu Ser Lys Lys Pro Gln Leu Pro Leu Val Thr Val Asn 128887 130 135 140 128888 Thr Thr Ala Gly Thr Ala Ser Glu Met Thr Val Phe Ala Ile Val Thr 128889 145 150 150 160128889 145 150 155 128890 Asn Gln Glu Asp Glu Thr Lys Tyr Pro Val Val Asp Lys His Phe Thr 128891 \$165\$ \$170\$ \$175\$128892 Pro Ile Ile Ala Val As
n Asp Ser Glu Leu Met Val Ala Met Pro Ala 128893 $$ 180
 $$ 185 $$ 190 128896 Ala Tyr Val Ser Thr Ala Ala Thr Pro Val Thr Asp Ala Cys Ala Ile 128897 210 215 220 128898 Lys Ala Ile Glu Ile Ile Val Asn Asn Leu Lys Asp Val Val Asp Asp 128899 225 230 235 240 128900 Gly Gln Asn Arg Glu Ala Arg Asp Ala Met Gln Tyr Gly Glu Tyr Leu 128901 245 250 255 128902 Ala Gly Met Ala Phe Ser Asn Ala Ser Leu Gly Tyr Val His Ser Met 128903 260 265 270 128904 Ala His Gln Leu Gly Gly Val Tyr Asn Leu Ser His Gly Leu Cys Asn

DATE: 06/21/2000

TIME: 11:59:03

Input Set : N:\jumbos\540209.txt Output Set: N:\CRF3\06212000\I540209.raw 275 128905 280 128910 Met Thr Gln Glu Gln Ala Ile Asn Ser Ala Ile Glu Ala Ile Glu Met 128911 325 330 335 335 128912 Leu Ser Gln Lys Val Gly Thr Asn Gln Arg Leu Ala Asp Arg Ala Ser 128913 340 345 W-0 128914 Arg Xaa Ser Pro E--> 128915 355 128918 <211> LENGTH: 179 / 8 128919 <212> TYPE: PRT 128920 <213> OPGANTER 128920 <213> ORGANISM: Enterobacter cloacae 128922 <400> SEQUENCE: 5681 128923 Gly Pro Lys Asp Leu Phe Pro Gln Lys Cys Asp Arg Val Met Ile Asp 10 128924 1 128925 Ala Ser Ser Val Val Ile Gly Asp Val Arg Met Ala Asp Asp Val Ser 128926 20 25 30 128927 Ile Trp Pro Leu Val Ala Ile Arg Gly Asp Val Asn Tyr Val Ala Ile 128928 35 40 45 128929 Gly Ala Arg Thr Asn Ile Gln Asp Gly Ser Val Leu His Val Thr His 128930 50 50 55 60 128931 Lys Ser Ser Tyr Asn Pro Glu Gly Asn Pro Leu Ile Ile Gly Glu Asp 128932 65 70 75 80 128933 Val Thr Val Gly His Lys Val Met Leu His Gly Cys Thr Ile Gly Asn 128934 85 90 95 128935 Arg Val Leu Val Gly Met Gly Ser Ile Leu Leu Asp Gly Val Ile Val 128936 100 105 110 128937 Glu Asp Asp Val Met Ile Gly Ala Gly Ser Leu Val Pro Gln Asn Lys 128938 115 120 125 128939 Arg Leu Glu Ser Gly Tyr Leu Tyr Leu Gly Ser Pro Ile Lys Gln Ile 128940 $$ 130 $$ 135 $$ 140 128941 Arg Pro Leu Lys Glu Ala Glu Ile Glu Gly Leu Lys Tyr Ser Ala Asn 128942 145 150 155 160 128943 Asn Tyr Val. Lys Trp Lys Asn Asp Tyr Leu Asp Gln Asp Asn Gln Thr 128944 $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$ E--> 128945 Gln Pro 128965 <210> SEQ ID NO: 5683 128966 <211> LENGTH: (119) //8 128967 <212> TYPE: PRT 128968 <213> ORGANISM: Enterobacter cloacae 128970 <400> SEQUENCE: 5683 128971 Trp Ser Gly His Ala Gly Gly Ala Gly Gly Ser Cys Gly Ala Thr Leu 128973 Ala Trp Arg Val Thr Cys Cys Arg Thr Gly Asp Arg Lys Ala Glu Lys 128974 20 25 30

128975 Gly Thr Asp Gly Met Asn Gln Ala Ile His Phe Pro Asp Arg Glu Ile

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/540,209

RAW SEQUENCE LISTING DATE: 06/21/2000 PATENT APPLICATION: US/09/540,209 TIME: 11:59:03 Input Set : N:\jumbos\540209.txt Output Set: N:\CRF3\06212000\I540209.raw 128976 35 128977 Trp Asp Glu Asn Lys Gln Ala Val Cys Phe Pro Val Leu Val His Gly 128978 50 55 60 128979 Met Gln Leu Thr Cys Ala Ile Lys Gly Glu Thr Leu Leu Gln Arg Phe 70 128980 65 128981 Gly Gly Ser Asp Pro Leu Ala Val Phe Cys Glu Asn Arg Trp Asp Leu 85 90 128982 128983 Glu Glu Glu Ala Ser Asp Leu Ile Arg Val Gln Glu Asp Asp Gln 128984 100 105 128985 Gly Trp Val Trp Leu Ser 128986 115 E--> 128986 128988 <210> SEQ ID NO: 5684 128989 <211> LENGTH: 66 128990 <212> TYPE: PRT 128991 <213> ORGANISM: Enterobacter cloacae 128993 <400> SEQUENCE: 5684 128994 Ser Thr His Tyr Ala Gln Arg Lys Leu Gly Gly Arg Trp Gln Leu Arg 128996 Gln Asn Phe Val Tyr Leu Val Ala Ile Phe Ala His Ile His Asn Leu 128997 20 25 30 128998 Trp Ser Val Lys Ile Leu Ser Pro Gln Pro Val Ile Tyr Ala Leu Met 128999 35 40 45129000 Ala Leu Ala Leu Leu Ala Trp Arg Tyr Lys Lys Phe Arg Gln Trp Leu 129001 50 55

129002 Arg E--> 129003 65 129005 <210> SEQ ID NO: 5685 129006 <211> LENGTH: 174 129007 <212> TYPE: PRT $129008\ <\!213\!>$ ORGANISM: Enterobacter cloacae $129010\ <\!400\!>$ SEQUENCE: 5685129011 Lys Gly Asp Asn Cys Ala Leu Arg Val Tyr Val Val Phe Tyr Pro Lys 129012 1 129013 Ile Ala Gly Asp Ser Gly Ile Met Ala Asp Lys Phe Gln Ile Leu Val 129014 20 25 30 129015 Leu Asn Gly Pro Asn Leu Asn Met Leu Gly Thr Arg Glu Pro Glu Lys 35 40 129017 Tyr Gly Thr Leu Thr Leu Ser Glu Ile Val Asn Arg Leu Ser Thr Glu 50 55 129019 Ala Ala Ser Leu Asn Val Asp Leu Asp His Phe Gln Ser Asn Ala Glu 129020 65 70 75 129021 Tyr Ala Ile Ile Asp Arg Ile His Gln Ala Lys Asp Thr Val Asp Tyr 129022 85 90 129023 Ile Leu Ile Asn Pro Ala Ala Phe Thr His Thr Ser Val Ala Ile Arg 129024 100 105 110 129025 Asp Ala Leu Leu Ala Val Ser Ile Pro Phe Ile Glu Ile His Leu Ser 129026 115 120 125 129027 Asn Val His Ala Arg Glu Pro Phe Arg His His Ser Tyr Leu Ser Asp 129028 130 135 140

DATE: 06/21/2000

PATENT APPLICATION: US/09/540,209

TIME: 11:59:03

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\I540209.raw

```
129029 Ile Ala Ala Gly Val Ile Cys Gly Leu Gly Ala Asp Gly Tyr Ser Tyr
      129030 145
                                        150
                                                                    155
129031 Ala Leu Gln Thr Ala Val Lys Arg Leu Ser Gln Ser His
E--> 129032 165 170
      129034 <210> SEQ ID NO: 5686
129035 <211> LENGTH: (197) / 96
129036 <212> TYPE: PRT
      129037 <213> ORGANISM: Enterobacter cloacae
       129039 <400> SEQUENCE: 5686
      129040 Gln Arg His Thr Pro Ala Ala Lys Asn Trp His Pro Tyr Cys Lys Thr
       129041 1
                                                               1.0
      129042 Cys Leu Thr Thr Gln Pro Leu Pro Ala Arg Tyr Phe Arg Thr Gly Gly 129043 20 25 30
      129044 Asn Met Asn Leu Arg Arg Leu Lys Tyr Phe Val Lys Ile Val Asp Ile 129045 \phantom{000}35\phantom{000} \phantom{000}40\phantom{000} \phantom{0000}45\phantom{0000}
      129046 Gly Ser Leu Thr Gln Ala Ala Glu Val Leu His Ile Ala Gln Pro Ala
129047 50 60
      129048 Leu Ser Gln Gln Val Ala Thr Leu Glu Gly Glu Met Asp Gln Gln Leu 129049 65 70 75 80
      129050 Leu Ile Arg Thr Lys Arg Gly Val Thr Pro Thr Glu Ala Gly Lys Ile 129051 \phantom{\bigg|}85\phantom{\bigg|}90\phantom{\bigg|}95\phantom{\bigg|}
      129052 Leu Tyr Thr His Ala Arg Thr Ile Leu Arg Gln Cys Glu Gln Ala Gln 129053 \phantom{\bigg|}100\phantom{\bigg|}105\phantom{\bigg|}
      129054 Leu Ala Val His Asn Val Gly Gln Thr Leu Ser Gly His Val Ser Ile
129055 115 120 125
      129056 Gly Leu Ala Pro Gly Thr Ala Ala Ser Ser Val Thr Met Pro Leu Leu 129057 130 135 140
      129058 Gln Ala Val Arg Ala Glu Leu Pro Glu Val Leu Val Tyr Leu His Glu
129059 145 150 155 160
      129062 Met Gly Gly Ala Val Arg Ser Leu Pro Gly Cys Arg Asp His Gln Pro
129063 180 185 190
129064 Ala Ala Ala Glu
E--> 129065 195
      129067 <210> SEQ ID NO: 5687
129068 <211> LENGTH: 80 79
129069 <212> TYPE: PRT
      129070 <213> ORGANISM: Enterobacter cloacae
129072 <400> SEQUENCE: 5687
      129073 Leu Ile Asp Gln Pro Val Lys Val Thr Thr Glu Pro Asp Gly Ser Arg
      129074 1
                                                               10
      129075 Trp Val Glu Val His Glu Pro Leu Ser Arg Asn Arg Ala Glu Phe Glu 129076 \phantom{\bigg|}20\phantom{\bigg|}20\phantom{\bigg|}25\phantom{\bigg|}30\phantom{\bigg|}
      129077 Ser Thr Asn Lys Val Pro Leu Pro Ile Ser Ala Ala Gln Arg Thr Gln
      129078 35
                                                   4.0
      129079 Leu Ile Ser Glu Gly Ala Gly Ala Glu Leu Glu Arg Arg Ser Gly Met
129080 50 55 60
      129081 Pro Val Lys Leu Ala Met Thr Gly Ser Ala Ser Leu Ala Gly Pro
```

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

```
80
                                                              75
E--> 129082 65
     129084 <210> SEQ ID NO: 5688
129085 <211> LENGTH: 114 //3
129086 <212> TYPE: PRT //3
      129087 <213> ORGANISM: Enterobacter cloacae
      129089 <400> SEQUENCE: 5688
      129090 Pro Cys Arg Cys Phe Arg Arg Cys Glu Gln Ser Tyr Arg Lys Cys Trp
                                                         1.0
      129091 1
      129092 Phe Ile Cys Met Arg Thr Val Val Pro Cys Ser Met Thr Asn Cys Ser 129093 20 25 30
      129094 Thr Val Ser Trp Ile Trp Ala Val Leu Tyr Asp Arg Ser Pro Val Ala
129095 35 40 45
      129095
      129096 Gly Ile Thr Ser Gln Pro Leu Leu Asn Glu Asp Leu Tyr Leu Val Gly
129097 50 55 60
      129097
                 50
      129098 Thr Arg Asp Cys Pro Gly Gln Ser Ile Asp Leu Thr Ala Val Ala Gln 129099 65 70 75 80
      129100 Met Asn Leu Phe Leu Ala Arg Asp Tyr Ser Ala Leu Arg Leu Arg Phe
                                                        90
                _85
      129102 Asp Glu Thr Pro Ser Leu Arg Pro Leu Asn Ala Asn Asn Phe Leu Leu
                                                    105
                  100
      129103
E--> 129104 Glu
      129107 <210> SEQ ID NO: 5689
129108 <211> LENGTH: (164) /63
129109 <212> TYPE: PRT
      129110 <213> ORGANISM: Enterobacter cloacae
129112 <400> SEQUENCE: 5689
      129113 Pro Val Tyr Thr Pro Leu Ala Leu Arg Asp Trp Phe Arg Ala Ala Pro
                                                         10
                                5
      129114 1
      129115 Arg Asn Pro Leu Lys Pro Leu Pro Arg Leu Arg Leu Val Gln His Arg 129116 20 25 30
      129117 Ala Asp Arg Glu Lys Ile Ser Arg Pro Ser Arg Arg Tyr Gln Glu Ala
129118 35 40
      129119 Gly Leu Ala Asp Lys Arg Ser Lys Met Leu Thr Met Trp Val Thr Glu 129120 50 55 60
      129121 Asp Glu His Arg Arg Leu Leu Glu Arg Cys Glu Gly Lys Gln Leu Ala
129122 65 70 75 80
      129123 Ala Trp Met Arg Gln Thr Cys Leu Asp Glu Lys Pro Ala Arg Ala Gly
129124 85 90 95
      129125 Lys Leu Pro Ser Ile Ser Pro Ala Leu Leu Arg Gln Leu Ala Gly Met
129126 100 105 110
      129127 Gly Asn Asn Leu Asn Gln Ile Ala Arg Gln Val Asn Ala Gly Gly Gly 129128 115 120 125
      129129 Ser Gly His Asp Arg Val Gln Ile Val Ala Ala Leu Met Ala Ile Asp 129130 130 135 140
      129131 Ala Gly Leu Glu Arg Leu Arg His Ala Val Leu Glu Lys Gly Ala Asp
                                                              155
      129132 145
                                      150
E--> 129133 Asp Asp Arg
      129238 <210> SEQ ID NO: 5692
129239 <211> LENGTH: 189
```

DATE: 06/21/2000 TIME: 11:59:03

PATENT APPLICATION: US/09/540,209

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\1540209.raw

```
129240 <212> TYPE: PRT
      129241 <213> ORGANISM: Enterobacter cloacae
      129243 <400> SEQUENCE: 5692
      129244 Thr Thr Val Leu Pro Ala Gly Leu Gly Glu Asn Asn Thr Ile Ser Gly
      129245 1
                                 5
                                                          1.0
      129246 Leu Leu Phe Leu Trp Val Pro Thr Arg Lys Thr Asn Phe Ile His Gly
      129247 20
                                                    25
                                                                            3.0
      129248 Glu Pro Leu Arg Gly Val Ile Thr Gln Ser Glu Asp Phe Arg Met Ala
      129249 35
                                               40
      129250 Lys Lys Val Gln Ala Tyr Val Lys Leu Gln Val Ala Ala Gly Met Ala
      129251
               50
                                         55
                                                                   60
      129252 Asn Pro Ser Pro Pro Val Gly Pro Ala Leu Gly Gln Gln Gly Val Asn 129253 65 70 75 80
      129254 Ile Met Glu Phe Cys Lys Ala Phe Asn Ala Lys Thr Glu Ser Met Glu
129255 85 90 95
      129256 Lys Gly Leu Pro Ile Pro Val Val Ile Thr Val Tyr Ala Asp Arg Ser 129257 \phantom{\bigg|}100\phantom{\bigg|}105\phantom{\bigg|}105\phantom{\bigg|} 110
                                                105
                          100
      129258 Phe Thr Phe Val Thr Lys Thr Pro Pro Ala Ala Val Leu Leu Lys Lys 129259 115 120 125
     129260 Ala Ala Gly Ile Lys Ser Gly Ser Gly Lys Pro Asn Lys Asp Lys Val
129261 130 135 140
     129262 Gly Lys Ile Ser Arg Ala Gln Leu Gln Glu Ile Ala Gln Thr Lys Ala
129263 145 150 155 160
     129264 Ala Asp Met Thr Gly Ser Asp Ile Glu Ala Met Thr Arg Ser Ile Glu
129265 165 170 175
     129266 Gly Thr Ala Arg Ser Met Gly Leu Val Val Glu Asp
129267 180 185
                                                   185
E--> 129267
     129269 <210> SEQ ID NO: 5693
129270 <211> LENGTH: 236 235
129271 <212> TYPE: PRT
      129272 <213> ORGANISM: Enterobacter cloacae
      129274 <400> SEQUENCE: 5693
      129275 Glu Met Ala Lys Leu Thr Lys Arg Met Ser Val Ile Arg Asp Lys Val
     129276 1
                                                        10
     129277 Asp Ala Thr Lys Gln Tyr Asp Ile Asn Glu Ala Ile Ala Leu Leu Lys 129278 20 25 30
     129279 Glu Leu Ala Thr Ala Lys Phe Val Glu Ser Val Asp Val Ala Val Asn
                 35
                                            40
     129281 Leu Gly Ile Asp Ala Arg Lys Ser Asp Gln Asn Val Arg Gly Ala Thr
               50
                                          55
                                                                60
     129283 Val Leu Pro His Gly Thr Gly Arg Ser Val Arg Val Thr Val Phe Ala
129284 65 70 75 80
     129285 Gln Gly Ala As<br/>n Ala Glu Ser Ala Lys Ala Ala Gly Ala Glu Leu Val<br/> 129286 95 95
     129287 Gly Met Glu Asp Leu Ala Asp Gln Ile Lys Lys Gly Glu Met Asn Phe 129288 \phantom{\bigg|}100\phantom{\bigg|}100\phantom{\bigg|}105\phantom{\bigg|}105\phantom{\bigg|}
     129289 Asp Val Val Ile Ala Ser Pro Asp Ala Met Arg Val Val Gly Gln Leu
129290 115 120 125
```

129291 Gly Gln Val Leu Gly Pro Arg Gly Leu Met Pro Asn Pro Lys Val Gly

PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000 TIME: 11:59:03

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\I540209.raw

	129292		130					135					140				_
	129292	Thr	Va1	Thr	Pro	Asn	Val	Ala	Glu	Ala	Val	Lys	Asn	Ala	Lys	Ala	Gly
	100004	1/5					150					122					100
	129294	Gln	Val.	Arq	Tyr	Arq	Asn	Asp	Lys	Asn	Gly	Ile	Ile	His	Thr	Thr	ITe
	120206					165					1.70					110	
	129297	Glv	Lvs	Val	Asp	Phe	Asp	Ala	Asp	Lys	Leu	Lys	Glu	Asn	Leu	Glu	Ala
	100000				1 8 0					T82					T 2 O		
	129298	Leu	Leu	Val	Ala	Leu	Lys	Lys	Ala	Lys	Pro	Thr	Gln	Ala	Lys	GTĀ	Vai
	120200			105					200					200			
	129300	Tyr	Ile	Lys	Lys	Val	Ser	Ile	Ser	Thr	Thr	Met	GLY	Ala	GIY	Val	Ald
	129302		210					215					220				
	129303	Val	Asp	Gln	Ala	Gly	Leu	Ser	Ala	Ala	Ala	Asn					
E>	129304						230					235					

The same descripany over seit in Segn. 5695-5697, 5700-01, 5703-04, 5706-5708, 5710-5714,5716-18, 5720-24,5726-32

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 06/21/2000

IMIBNI MILLIONIZON.

PATENT APPLICATION: US/09/540,209

TIME: 11:59:46

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\I540209.raw

```
L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:49 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:2 L:49 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:2
L:130 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:7
L:130 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7
L:191 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:9 L:191 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:9
L:241 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:11 L:241 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:11
L:269 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:12 L:269 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:12
\text{L}:554~\text{M}:258~\text{W}: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:554 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:14
L:555 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
M:340 Repeated in SeqNo=14
L:570 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:15
L:570 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:15
L:604 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:16
L:604 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:16
L:634 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:17
L:634 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:17
L:663 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:18
L:663 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:18
L:717 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:22
L:717 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:22
L:809 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:28
L:809 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:28
L:897 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:32
L:897 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:32
L:967 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:36
L:967 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:36
L:1181 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:49 L:1181 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:49
L:1226 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:52
L:1226 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:52
L:1320 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:57
L:1320 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:57
L:1362 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:60
L:1362 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:60
L:1416 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:62
L:1416 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:62
L:1451 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:64
L:1451 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:64
L:1570 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:72
L:1570 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:72
L:1574 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:72
M:340 Repeated in SeqNo=72
```

 VERIFICATION SUMMARY
 DATE: 06/21/2000

 PATENT APPLICATION: US/09/540,209
 TIME: 11:59:46

Input Set : N:\jumbos\540209.txt
Output Set: N:\CRF3\06212000\I540209.raw

L:1603 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:74 L:1603 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:74 L:1654 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:75 L:1654 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:75 L:1883 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:88 L:1883 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:88 L:2094 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:100 L:2094 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:100 L:2111 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:101 L:2111 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:101 L:2159 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:102 L:2159 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:102 L:2187 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:103 L:2187 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:103 L:2188 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:103 M:340 Repeated in SeqNo=103 L:2361 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:113 L:2361 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:113 L:2555 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:122 L:2555 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:122 L:2650 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:127 L:2650 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:127 L:2668 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:127 M:340 Repeated in SeqNo=127 L:2669 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:127 L:2820 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:134 L:2820 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:134 L:2852 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:135 L:2852 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:135 L:2853 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:135 M:340 Repeated in SeqNo=135 L:3066 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:148 L:3066 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:148 L:3089 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:149 L:3089 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:149 L:3171 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:152 L:3171 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:152 L:3288 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:156 L:3288 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:156 L:3290 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:156 M:340 Repeated in SeqNo=156 L:3291 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:156 L:3292 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:156 L:3339 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:158 L:3339 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:158 L:3519 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:160 L:3519 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:160 L:3522 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:160 M:340 Repeated in SeqNo=160

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000 TIME: 11:59:46

Input Set : N:\jumbos\540209.txt

Output Set: N:\CRF3\06212000\I540209.raw

```
L:3523 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:160 L:3692 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:161
M:340 Repeated in SeqNo=161
L:4207 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:189
L:4224 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:190
L:128273 M:252 E: No. of Seq. differs, <211>LENGTH:Input:77 Found:76 SEQ:5664
L:128321 M:252 E: No. of Seq. differs, <211>LENGTH:Input:89 Found:88 SEQ:5666
L:128346 M:252 E: No. of Seq. differs, <211>LENGTH:Input:131 Found:130 SEQ:5667
L:128383 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5668
L:128383 M:252 E: No. of Seq. differs, <211>LENGTH:Input:225 Found:224 SEQ:5668
L:128465 M:252 E: No. of Seq. differs, <211>LENGTH:Input:308 Found:307 SEQ:5670
L:128518 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5671
L:128518 M:252 E: No. of Seq. differs, <211>LENGTH:Input:335 Found:334 SEQ:5671
L:128698 M:252 E: No. of Seq. differs, <211>LENGTH:Input:173 Found:172 SEQ:5675
L:128743 M:252 E: No. of Seq. differs, <211>LENGTH:Input:114 Found:113 SEQ:5677
L:128803 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5678
L:128803 M:252 E: No. of Seq. differs, <211>LENGTH:Input:370 Found:369 SEQ:5678
L:128915 M:252 E: No. of Seq. differs, <211>LENGTH:Input:357 Found:356 SEQ:5680
L:128945 M:252 E: No. of Seq. differs, <211>LENGTH:Input:179 Found:178 SEQ:5681
L:128986 M:252 E: No. of Seq. differs, <211>LENGTH:Input:119 Found:118 SEQ:5683
L:129003 M:252 E: No. of Seq. differs, <211>LENGTH:Input:66 Found:65 SEQ:5684
L:129032 M:252 E: No. of Seq. differs, <211>LENGTH:Input:174 Found:173 SEQ:5685
L:129065 M:252 E: No. of Seq. differs, <211>LENGTH:Input:197 Found:196 SEQ:5686
L:129082 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5687
L:129082 M:252 E: No. of Seq. differs, <211>LENGTH:Input:80 Found:79 SEQ:5687
L:129104 M:252 E: No. of Seq. differs, <211>LENGTH:Input:114 Found:113 SEQ:5688
L:129133 M:252 E: No. of Seq. differs, <211>LENGTH:Input:164 Found:163 SEQ:5689
L:129267 M:252 E: No. of Seq. differs, <211>LENGTH:Input:189 Found:188 SEQ:5692
L:129304 M:252 E: No. of Seq. differs, <211>LENGTH:Input:236 Found:235 SEQ:5693
L:129352 M:252 E: No. of Seq. differs, <211>LENGTH:Input:128 Found:127 SEQ:5695
L:129385 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5696
L:129385 M:252 E: No. of Seq. differs, <211>LENGTH:Input:200 Found:199 SEQ:5696
L:129408 M:252 E: No. of Seq. differs, <211>LENGTH:Input:119 Found:118 SEQ:5697
L:129527 M:252 E: No. of Seq. differs, <211>LENGTH:Input:172 Found:171 SEQ:5700
L:129556 M:252 E: No. of Seq. differs, <211>LENGTH:Input:173 Found:172 SEQ:5701
L:129632 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5703
L:129632 M:252 E: No. of Seq. differs, <211>LENGTH:Input:85 Found:84 SEQ:5703
L:129667 M:252 E: No. of Seq. differs, <211>LENGTH:Input:219 Found:218 SEQ:5704
L:129705 M:252 E: No. of Seq. differs, <211>LENGTH:Input:111 Found:110 SEQ:5706
L:129742 M:252 E: No. of Seq. differs, <211>LENGTH:Input:233 Found:232 SEQ:5707
L:129769 M:252 E: No. of Seq. differs, <211>LENGTH:Input:158 Found:157 SEQ:5708
L:129815 M:252 E: No. of Seq. differs, <211>LENGTH:Input:113 Found:112 SEQ:5710-
L:129852 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5711
L:129852 M:252 E: No. of Seq. differs, <211>LENGTH:Input:185 Found:184 SEQ:5711
L:129887 M:252 E: No. of Seq. differs, <211>LENGTH:Input:212 Found:211 SEQ:5712
L:129912 M:252 E: No. of Seq. differs, <211>LENGTH:Input:134 Found:133 SEQ:5713
L:129957 M:252 E: No. of Seq. differs, <211>LENGTH:Input:303 Found:302 SEQ:5714
L:130003 M:252 E: No. of Seq. differs, <211>LENGTH:Input:119 Found:118 SEQ:5716
L:130036 M:252 E: No. of Seq. differs, <211>LENGTH:Input:208 Found:207 SEQ:5717
```

VERIFICATION SUMMARY

DATE: 06/21/2000 TIME: 11:59:46

PATENT APPLICATION: US/09/540,209

```
L:130077 M:252 E: No. of Seq. differs, <211>LENGTH:Input:262 Found:261 SEQ:5718
L:130129 M:252 E: No. of Seq. differs, <211>LENGTH:Input:166 Found:165 SEQ:5720 .
L:130146 M:252 E: No. of Seq. differs, <211>LENGTH:Input:73 Found:72 SEQ:5721
L:130189 M:252 E: No. of Seq. differs, <211>LENGTH:Input:287 Found:286 SEQ:5722
L:130222 M:252 E: No. of Seq. differs, <211>LENGTH:Input:209 Found:208 SEQ:5723
L:130247 M:252 E: No. of Seq. differs, <211>LENGTH:Input:124 Found:123 SEQ:5724.
L:130307 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5726
L:130307 M:252 E: No. of Seq. differs, <211>LENGTH:Input:255 Found:254 SEQ:5726
L:130340 M:252 E: No. of Seq. differs, <211>LENGTH:Input:202 Found:201 SEQ:5727
L:130367 M:252 E: No. of Seq. differs, <211>LENGTH:Input:154 Found:153 SEQ:5728
L:130382 M:252 E: No. of Seq. differs, <211>LENGTH:Input:64 Found:63 SEQ:5729.
L:130405 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5730
L:130405 M:252 E: No. of Seq. differs, <211>LENGTH:Input:120 Found:119 SEQ:5730
L:130422 M:252 E: No. of Seq. differs, <211>LENGTH:Input:72 Found:71 SEQ:5731
L:130443 M:252 E: No. of Seq. differs, <211>LENGTH:Input:104 Found:103 SEQ:5732
L:130611 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5736
L:130959 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5746
L:131118 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5751
L:131135 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5752
L:131197 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5754
L:131306 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5757
L:131695 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5766
L:131714 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5767
L:131741 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5768
L:131770 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5769
L:132237 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5780
L:132608 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5791
L:132981 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5800
L:133010 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5801
L:133945 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5824
L:134076 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5829
L:134093 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5830
L:134450 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5839
L:134546 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5841
L:134961 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5854
L:135201 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5860
L:135421 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5866
L:136052 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5879
L:136490 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5889
L:137004 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5905
L:137074 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5907
L:137099 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5908
L:137744 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5925
L:137852 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5927
L:137974 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5931
L:138037 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5932
L:138252 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5937
L:138614 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5945
L:138733 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:5948
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/540,209

DATE: 06/21/2000 TIME: 11:59:46

L:138789 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5950
L:139330 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5965
L:139433 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5968
L:139622 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5973
L:139724 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5977
L:139846 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5981
L:139863 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SE	Q ID:5982